



Review Article

A REVIEW ON PANCHAJEERAKA PAKA INDICATED IN SUTIKA KALA

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Health of women reflects status of the society. Pregnancy and childbirth leads to physiological and psychological changes in women. In developing countries, malnutrition, repeated child births, early age conception and other debilitating diseases can hamper mother's health. Women in post partum period are vulnerable to many disorders some of which may lead to serious condition if left untreated. This can hamper physical as well as mental health. Even though such post partum care has been practicing worldwide, methods, drugs, medication forms varies in accordance with place, climate, availability of drugs etc. Special regimen, dietary preparations and activities are recommended in Ayurveda during *Sutika kala* (post natal period). Since mother's health condition generally affects the health of new born, keen care has to be taken for any ailments arising during post natal period. Main principles in management during normal puerperium include restoring the health of mother, preventing infection and promoting breast feeding. *Pancha jeeraka paka* is one of the medications in Ayurvedic classics recommended during Puerperium. This article is an attempt to review on *Pancha jeeraka paka*, its ingredients and possible mode of action in *Sutikarogas* (diseases occurring during post natal period).

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INTRODUCTION

Prevention of diseases is one of the primary objectives of Ayurveda. There is wide description in Ayurvedic classical books about care and attention which should be given to women during post partum period. Specific diets, regimens, hygienic care and certain potent herbal formulations in the form of food and medicines are recommended highly during this period which enables body to restore mother's strength thereby imparts better health to child. Puerperium is the period following childbirth during which the body tissues, especially the pelvic organs revert back approximately to the pre pregnant state both anatomically and physiologically.^[1] During the physiological process of involution, changes occurs in the muscles, blood vessels and endometrial component of uterus. ^[2] Irregular vaginal bleeding, leucorrhoea, back ache, slight degree of uterine descent and urinary and anal incontinence are some common gynecological problems arising during postpartum period. ^[3]

Puerperal period in *Ayurveda* is termed as *Sutika kala*. There are different opinions about duration of this period. *Acharya Susruta* and *Vagbhata* had instructed that after one and half month of regulated diet and mode of life, the woman cannot be termed as *Sutika*^[4] (puerperal women). Various *Aharakalpana* (food preparations), *Vihara* (mode of life) and medicinal preparations to be given are instructed in Ayurveda during this period.

Sutika, who is weak due to development of fetus, loss of *Dhatus*, (bodily tissues) excretion of *Kleda* (moisture content) blood and exhaustion due to labour pain can regain her pre-pregnancy state by following this *Paricharya*^[5] (proper attention). *Angamarda* (Body ache), *Jwara* (fever), *Kasa* (cough), *Pipasa* (thirst), *Gurugatrata* (heaviness in body), *Sotha* (oedema), *Soola* (abdominal pain) and *Atisara* (diarrhea) are the *Lakshanas* (symptoms) of *Sootikaroga*^[6]. *Sutikajwara*, *Makkala Shoola* (condition arising due to accumulation of blood in

the uterus), *Yonibhramsha* (vaginal prolapse), *Yonikshata* (perineal wound) etc comes under *Sutika Roga* or *Sutika Vyapada* (diseases occurring during post natal period). *Sutika roga* developed as a result of *Mithyopacara* (improper management during *peurperium*), *Samklesha*, *Vishama* (irregular dietetic practices) and *Ajirna bhojana* (eating before digestion of previously ingested food) are considered as *Daruna* (difficult to manage). The diseases such as fever, diarrhea, edema, abdominal distension are caused by aggravation of *Kapha* and *Vata* in body with *Ksheena mamsa* (depleted musculature), reduced *Bala* (strength) and *Agni* (digestive fire).^[7]

Pancha-Jeeraka Paka is one of classical preparation recommended during *Sutika Kala* in

Ayurveda. It is mentioned in *Bhava Prakasha Chikitsasthana*, *Yonirogaadhikara* as well as in *Yogaratanakara Stree Garbha Roga adhikar*. In *Yogaratanakara*, *Vidariphala churna* (*Peuraria tuberosa* (Roxb.ex Willd.) DC) is included instead of *Badari phala churna*.^[8] Each drugs are taken in *Pala matra* (48 gms) *Gudam* in *Pala satam* (4.8kg), *Ksheera* in *Prasthadwayam* (1.5L) and *Sarpi* in *Kudavam* (192ml). These ingredients should be methodically combined together. The formulation is indicated generally in post partum period, *Sootikaroga*, *Yoniroga* (gynaecological disorders), *Jwara* (fever), *Kshaya* (phthisis), *Swasa* (respiratory disorders), *Kasa* (cough) *Panduroga* (anaemia) *Kaarsyam* (emaciation) and *Vatarogas* (diseases arising due to *Vata dosha*).

Table 1: List of ingredients of Pancha-Jeeraka Paka^[9]

S.No.	Name of drug	Botanical name	Parts used	Dose
1	<i>Jeeraka</i>	<i>Cuminum cyminum</i> Linn.	Fruit	1Pala
2	<i>Sthoola jeeraka</i>	<i>Nigella Sativa</i> Linn.	Fruit	1Pala
3	<i>Satapushpa</i>	<i>Anethum graveolans</i> Linn.	Fruit	1Pala
4	<i>Misreya</i>	<i>Foeniculam vulgare</i> Mill.	Fruit	1Pala
5	<i>Yavani</i>	<i>Trachyspermum ammi</i> (L.) Sprague	Fruit	1Pala
6	<i>Ajamoda</i>	<i>Apium graveolens</i> Linn.	Fruit	1Pala
7	<i>Dhanyaka</i>	<i>Coriandrum sativum</i> Linn.	Fruit	1Pala
8	<i>Methika</i>	<i>Trigonella foenum-graecum</i> Linn.	Fruit	1Pala
9	<i>Sunthi</i>	<i>Zingiber officinale</i> Rosc.	Rhizome	1Pala
10	<i>Krishna</i>	<i>Piper longum</i> Linn.	Fruit	1Pala
11	<i>Kanamoolam</i>	<i>Piper longum</i> Linn.	Root	1Pala
12	<i>Chitraka</i>	<i>Plumbago zeylanica</i> Linn	Root	1Pala
13	<i>Hapusha</i>	<i>Juniperus communis</i> Linn.	Fruit	1Pala
14	<i>Badaraphala</i>	<i>Ziziphus jujuba</i> Lam.	Fruit	1Pala
15	<i>Kushta</i>	<i>Saussurea costus</i> (Falc.) Lipsch.	Root	1Pala
16	<i>Kampillakam</i>	<i>Mallotus philippensis</i> (Lamk.) Muell.-Arg	Hairs of fruit	1Pala
17	<i>Gudam (Jaggery)</i>	<i>Saccharum officarum</i> L.	Concentrated Juice	100 pala
18	<i>Ksheera</i>	Cow's milk		2 Prastha
19	<i>Sarpi</i>	Cow's ghee		1 Kudava

Table 2: Ingredients and their Properties

S.No	Name of drug	Rasa	Guna	Virya	Vipaka	Karma
1	Jeeraka ^[10]	Katu	Laghu Ruksha	Ushna	Katu	Deepana, Kapha Vatahara Garbhashaya visudhikrt
2	Sthoola Jeeraka ^[11]	Katu	Ruksha Teekshna	Ushna	Katu	Deepana Garbhashaya visudhikrt
3	Satapushpa ^[12]	Katu	Teekshna, Laghu	Ushna	Madhura	Deepana Vata Kapha hara
4	Misreya ^[13]	Katu	Ruksha	Ushna	Madhura	Hrdya, Pachana Vata Kapha hara
5	Yavani ^[14]	Katu Tikta	Teekshna Ushna	Ushna	Katu	Pachana, Ruchya Vata Kapha hara
6	Ajamoda ^[15]	Katu	Teekshna, Laghu, Deepana, Hrdya	Ushna	Katu	Kapha Vatahara, Vrshya, Balakari
7	Dhanyaka ^[16]	Kashaya Tikta, Katu	Snigdha, Laghu	Ushna	Madhura	Mootrajanana, Deepana, Pachana Tridoshasamaka
8	Methika ^[17]	Tikta	Laghu Snigdha	Ushna	Katu	Vata Kaphahara, Vedanahara, Deepana, Shothanasaka, Pachana, Anulomana, Stanyajanana
9	Sunthi ^[18]	Katu	Laghu, Snigdha	Ushna	Madhura	Kapha Vatahara, Pachana
10	Krishna ^[19]	Katu	Snigdha	Anushna	Madhura	Vata Kapha hara Deepana
11	Kanamoolam ^[20]	Katu	Laghu Rooksha	Ushna	Katu	Vata Kapha hara
12	Chitraka ^[21]	Katu	Rooksha, Laghu, Pacana	Ushna	Katu	Vahnikrt, Grahi Vata Kapha hara,.
13	Hapusha ^[22]	Katu Tikta	Laghu, Ruksha, Tikshna	Ushna	Katu	KaphaVatahara, Grahi, Vrshya, Vranaropana, Deepana, Artavajanaana, Garbhasayashothahara, Mootrajanana
14	Badaraphala ^[23]	Madhura	Snigdha	Sheeta	Madhura	Pittakaphahara
15	Kushtam ^[24]	Tikta Katu Madhura	Laghu, Ruksha, Tikshna	Ushna	Katu	Kapha Vatahara Vrshya, Deepana Garbhashayaottejaka Artavajanaana, Stanyajanana Vranaropaka
16	Kampillakam ^[25]	Katu	Laghu, Ruksha, Tikshna	Ushna	Katu	Kapha Vatahara, Vranasodhana ropana, Deepana
17	Gudam ^[26]	Sakshara Madhura	Snigdha	Na ati Sheeta	Madhura	Balya, Vrshya, Mootra Rakta shodhanam, Vataghnam, Natipittajith
18	Ksheera ^[27]	Madhura	Guru Snigdha	Sheeta	Madhura	Vata Pittahara, Sleshmalam, Vrshya
19	Sarpi ^[28]	Madhura	Guru Snigdha	Sheeta	Madhura	Agnideepana, Vata Pittahara, Rasayana

Table 3: Ingredients listed in Mahakashayas

Drugs	Mentioned in <i>Caraka's Mahakashayas</i>
<i>Citraka</i>	<i>Lekhaniya, Deepaniya, Bhedaniya, Triptighna, Arsoghna, Soolaprashamanani</i>
<i>Pippali</i>	<i>Deepaniya Kantya Triptighna Asthapanopaga Sirovirechanopaga, Hikkanigrahanani, Kasahara, Seetaprashamanani, Soolaprashamanani</i>
<i>Pippalimula</i>	<i>Deepaniya Soolaprashamanani</i>
<i>Ajamoda</i>	<i>Deepaniya Soolaprashamanani</i>
<i>Sunthi</i>	<i>Deepaniya Triptighna Arsoghna Sthanyasodhana, Seetaprashamanani Soolaprashamanani</i>
<i>Badara</i>	<i>Hrdya, Triptighna Swedopaga, Virechanopagani Chardinigrahanani, Hikkanigrahanani, Sramaharani Udarda prashamanani</i>
<i>Kushta</i>	<i>Asthapanopaga, Lekhaniya Sukrasodhanani</i>
<i>Satapushpa</i>	<i>Asthapanopaga, Anuvasanopaga</i>
<i>Dhanyaka</i>	<i>Trishnanigrahanani, Seetaprashamanani</i>

Pharmacological studies of ingredients

Satapushpa was reported to have antimicrobial, antibacterial, anti inflammatory, antihyperlipidemic and antihypercholesterolaemic activities. [29] The oil obtained from seeds of *Apium graveolans* in its pure form as well as 1:50 and 1:100 dilutions was reported to have anti bacterial activity against *Bacillus subtilis*, *Escherichia coli*, *Sarcina lutea*, *Staphylococcus aureus* and *Pasteurella multocida* and antifungal activity against *Aspergillus niger*, *A.fumigatus*, *Candida albicans*, *Penicillium regulosum* and *Microsporum gypseum* (Goutam and Purohit, 1977). [30] *Misreya* is antispasmodic, antimicrobial, antiimplantation, diuretic, analgesic, antipyretic, estrogenic and anti-inflammatory. [31] In a clinical study seeds of coriander (6g, two times a day for 20d) were administered orally to 20 patients of anxiety. On an average 68.9percent got complete relief from their symptoms (Siddiqui et al.2001) [32] The essential oil from herb and seeds of *Coriandrum sativum* showed antibacterial activity against *Escherichia coli*, *Bacillus megatherium*, *Bac subtilis*, *Staphylococcus aureus*, *Xanthomonas campestris* and *Proteus vulgaris* (Minija and Thoppil, 2001). [33] The antimicrobial action of cumin both oil and aqueous has assessed against a wide range of valuable and pathogenic gram-positive and gram- negative microbial strain. [34] The presence of phytoestrogens in cumin has been shown and also related to its anti osteoporotic effects. [35] Moreover diuretic property of the fenugreek decreases pelvic hyperemia and this property may explain the effectiveness of fenugreek in dysmenorrhoea and reduction of mastalgia [36]

Fenugreek is anti-inflammatory, antipyretic, analgesic, antibacterial, anti androgenic and mild smooth muscle relaxant [37] There is positive effects of ginger in folliculogenesis and implantation. Study on ginger stress its importance as an antioxidant to suppress reactive oxygen species build up and maintain physiological levels of free radicals for proper cell functioning and homeostasis. [38] *Piper longum* has anti estrogenic property. [39] *Juniperus communis* was reported to have antifungal, antiviral, anti-progestational, anti implantation, antimicrobial and platelet inhibitory activities. [40] It showed 55% prostaglandin inhibition and 78% PAF (platelet activating factor) exocytose inhibition. [41] *Kushta* is diuretic, antibacterial, antiseptic, hypertensive, spasmolytic anti-inflammatory and immune-stimulant. [42] *Yavani* is antimicrobial, antibiotic and diuretic. [43] *Kampillaka* is antibacterial, anti-spasmodic, purgative, haemostatic and antimicrobial. [44]

DISCUSSION

Women are vulnerable to many diseases of reproductive system. Major physiological changes occurring in reproductive system during puerperal period includes uterine involution, lochia discharge, wound healing and breast milk production. Puerperal sepsis, urinary tract infection, mastitis and pulmonary infection are the common causes of puerperal pyrexia. Excess enlargement of the uterus, anemia, and retained bits of tissues are the causes of sub involution. [45] These conditions during postnatal period not only affects mother but also can hamper child's health. In order to prevent and

resolve such problems herbs, in the form of diet and medicines are highly recommended during that period. Many of such formulations have been practiced centuries. As an aid to restore health and prevent certain diseases, these medicines are included under postnatal regimen and followed routinely. Diseases arising during postnatal period are due to weak digestive power, psychological factors, weak immune status and blood loss.

Panchajeeraka Paka is one of such formulation which is indicated in diseases occurring in postnatal period and gynaecological disorders. *Sutika* can take *Panchajeeraka Paka*, *Gudodaka*, *Soubhagya Shunti*, *Pratapalankeshwara Rasa* for one and half month. These medications enable *Vata Kapha samana*, rejuvenates the general health of puerperal women, improve lactation, enhance involution and provide strength to the reproductive organs.^[46] Most of the drugs in this preparation possess *Katurasa*, *Laghu Rooksha Teekshna guna*, *Ushna veerya*, *Pachana*, *Deepana* property *Katu vipaka* and mitigates *Vata Kapha doshas*. Through these properties proper formation of *Ahara rasa* can be accomplished. It is well formed *Ahara rasa* which is responsible for milk production and later attainment of menstruation.^[47] There is description of administration of drugs possessing *Jeevaniya* (which increases vitality), *Brmhaniya* (nourishing), *Madhura* (possessing sweet taste) and *Vatahara* as *Abhyanga* (oil massage), *Udwartana* (herbal powder massage), *Parisheka* (showering), *Avagaha* (submerged in medicated oil or decoction) and internally as diet during *Sutika kala*.^[48] Drugs in this preparation reduce inflammation, kindle digestive power and enhance wound healing. Besides this medicine has nourishing property. *Guda* is a rich source of Iron, hence has an excellent property of curing anemia, which can occur after significant blood loss. Both *Ghrta* and *Ksheera* possess vitalizing and nourishing property. Milk provides calcium and protein which are demanded during lactation period.

Panchajeeraka Paka preparation can cure fever, general weakness, respiratory diseases, cough, anemia, emaciation and diseases caused by *Vata*. Anti inflammatory, spasmolytic, antimicrobial, analgesic and antipyretic properties are present in ingredients.

CONCLUSION

Health of women plays an important place in the progress of a nation. Care and support should be given to the mother and child during post partum period. *Sutika kala* management is very essential as *Sutika rogas* can interfere women's

routine life as well as infant's health. *Panchajeeraka Paka* is an important formulation mentioned for *Sutika roga*. This medicinal preparation aids in the restoration of health in postpartum phase without any side effect. It is a potent formulation, in which ingredients are easily available, safe and cheap hence further clinical, pharmacological and safety studies of this formulation is essential.

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